

hTIR1 1 -MLCTARVGEIQLLISCAAFACHSTES-----SEPTILPGDMLHGIPTI-----ESGCLQVRHR-----PATIQRSCSNEVGHIFOMRLQVEEENNSTLHPNHEIGVQIDVCSO-SANWYATIRV 119
 rTIR1 1 MLFWAHLISQI--VVCWAFSCORTES-----SPESLPGDMLHGIPTI-----GDCLOVRHR-----PATIQRSCSNEVGHIFOMRLQVEEENNSTLHPNHEIGVQIDVCSO-SANWYATIRV 118
 hTIR2 1 -GPRKTKICSIFT-----EMLVLAIF--AE-----NSDMLPGDMLHGIPTI-----FANMGIVHNFLOVPOCK-EYEVKVGNGNUQAMRFVPEEINNDSSELPAVILGVEITDVQYI--SNWYOPMIFV 115
 rTIR2 1 -GPOQRTCLISIT-----LJHVLKPKGIVE-----NSDMLPGDMLHGIPTI-----FANMGIVHNFLOVPOCK-EYEVKVGNGNUQAMRFVPEEINNDSSELPAVILGVEITDVQYI--SNWYOPMIFV 118
 hTIR3 1 ---MLGPAMFISIMAILHPGTCAPLOIS-----QOLRMKGMVIGGIPTI-----GFAEFGICSEIRPSSEVCT---FESSVCLLMAIDMAMAVEEINNLSLHPRLGIDITFCSPPWAMKPSIMV 117
 rTIR3 1 ---MPGLIICISIAAEELGMSLLOIS-----QOLKACQDMLGGIPTI-----GTEETATLNOCTOPNGILOT---FESP-GLFANAMAMAVEEINNLSLHPRLGIDITFCSPPWAMKPSIMV 117
 mGLUR1 1 MYRLLIFFPMITEMSIPMPDRKVIILAGASSOQVARMDEDVITELFSLVHOPPEKVPE-----RACQ--EIREQIGIORVPAHEHTDKLADNPVLLNPEHEHSEITRDSQWHSVALFQSTEEI 123

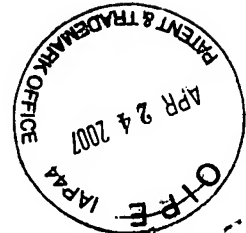
 hTIR1 120 SLIF-----QHHEIJDOLLHYSI-----TVLAVIGPDSINWATITALLISPTI-----SVTMAISASSETISVOMPSTRIRLUNKYOVETWMLLOFEGMMISLVGSSDDI-GOIFVQALENOITGO 236
 rTIR1 119 ALQG-----PRHILQVILRNHSS-----KVAVEIGPDVIDHATITALLIGPEHMLIVSIESSVMSLAKRPESELRIVPESDEQVEVWVLOLSEFGWMSLITSGDY-GOIGVQALETAVR 235
 hTIR2 116 AHE-----DMLPHODISNITS-----KVAVIGPDVSESVMTEVAFSLITELIPQITSAISIDIPDKVRPALRITLPSNDHFAWVOIMLHFRANWHTIVMSSDIYGRDNGQITGERVARD 231
 rTIR2 119 AOD-----DDLRLKDYQOYMP-----HWAVIGPDVSESVMTEVAFSLITELIPQITSAISIDIPDKVRPALRITLPSNDHFAWVOIMLHFRANWHTIVMSSDIYGRDNGQITGERVARD 231
 hTIR3 118 AKAG-----SRDIAVCNTOYOP-----RVIAVIGPDSSEIAMVIGKEFSEIEMPOISGSMELLISARETPESERTVPSDVQLTAAELIOFEGNMAVILGSDDEYGRGLSISALAN 234
 rTIR3 118 AKVG-----SOSTAVCNTOYOP-----RVIAVIGPDSSEIAMVIGKEFSEIEMPOISGSMELLISARETPESERTVPSDVQLTAAELIOFEGNMAVILGSDDEYGRGLSISALAN 234
 mGLUR1 124 RDSLISIREKQVCLNRCPLDQOTLPEGRTKKPIAGHGPSSSVATQVQVLOJEDIQVNSAISIDISDXTLYKTELWESDITQARALDIVKRYNTVMSAVHTEGNTFESGMDHEHETIAAOE 252

 hTIR1 237 FCIAPKQIMFESBOVG-----DER--MCLMBITAG-----ACQVWAAVSSROIAVETESMIVTITCKVANA-----SEAWLISRHTICVPGIORICMILGVAIQRAVPLKAFEEAVAR---ADKATPRCHK 354
 rTIR1 236 IQVAKQIMFESBOVG-----DER--MCSMOHAG-----ARTIWAWSRHLAVETESMIVTITCKVANA-----SEAWLISRHTICVPGIORICMILGVAIQRAVPLKAFEEAVAR---ADKATPRCHK 354
 hTIR2 232 FCIAPQETITLQPNOMTSEFORLTVIVDKIQQ-----STARVAAVSPDLTITHEFNEMLPQVETGAVADT-----SSSWAIDPVHLNTELGHILGIFLGLTICQSVPTPEFSERREMGPO---AGPPLSRTSQ 355
 rTIR2 236 FCIAPQEVURIPESSQVNRSEFORLDNIIDKLR-----TSARVAAVSPDLTITHEFNEMLPQVETGAVADT-----SSSWAIDPVHLNTELGHILGIFLGLTICQSVPTPEFSERREMGPO---AGPPLSRTSQ 355
 hTIR3 235 FCIAPQEVURIPESSQVNRSEFORLDNIIDKLR-----TSARVAAVSPDLTITHEFNEMLPQVETGAVADT-----SSSWAIDPVHLNTELGHILGIFLGLTICQSVPTPEFSERREMGPO---AGPPLSRTSQ 359
 rTIR3 235 FCIAPQEVURIPESSQVNRSEFORLDNIIDKLR-----TSARVAAVSPDLTITHEFNEMLPQVETGAVADT-----SSSWAIDPVHLNTELGHILGIFLGLTICQSVPTPEFSERREMGPO---AGPPLSRTSQ 359
 hTIR3 235 FCIAPQEVURIPESSQVNRSEFORLDNIIDKLR-----TSARVAAVSPDLTITHEFNEMLPQVETGAVADT-----SSSWAIDPVHLNTELGHILGIFLGLTICQSVPTPEFSERREMGPO---AGPPLSRTSQ 355
 mGLUR1 253 IQVAKQIMFESBOVG-----DER--MCLMBITAG-----ACQVWAAVSSROIAVETESMIVTITCKVANA-----SEAWLISRHTICVPGIORICMILGVAIQRAVPLKAFEEAVAR---ADKATPRCHK 373

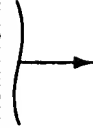
 hTIR1 355 G-----SWQSSVQLOREQOAFMAHTMPKIKAFS-----MSSANVAPVAVAVAGHIOHIGCA-----SGACSR-GVAPVPOHIOHIGHILFEL-THKOTVAFNDNRDPLSSVNTITADNCPKW-ITIVL 466
 rTIR1 354 G-----SWQSTVQLOREQHETIRQMPKIKAFS-----MSSANVAPVAVAVAGHIOHIGCA-----SEICSR-GVAPVPOHIOHIGHILFEL-THKOTVAFNDNRDPLSSVNTITADNCPKW-ITIVL 465
 hTIR2 356 S-----YTC--MCOODQIMFISFNITILISG-----ERMMSWSAVAVAHALHSLIGOD-----KSTCTK-RVVPVPOHIOHIGHILFEL-THKOTVAFNDNRDPLSSVNTITADNCPKW-ITIVL 465
 rTIR2 360 R-----TTG--MCOODQIMFISFNITILISG-----ERMMSWSAVAVAHALHSLIGOD-----KSTCTK-RVVPVPOHIOHIGHILFEL-THKOTVAFNDNRDPLSSVNTITADNCPKW-ITIVL 465
 hTIR3 356 EREGLEDVQOPPODCITELONVSAGIN-----HHQTESVAAVAVAGHIOHIGCA-----ASGPAQDVPVPOHIOHIGHILFEL-THKOTVAFNDNRDPLSSVNTITADNCPKW-ITIVL 469
 rTIR3 355 -AELDLERMVMPGQSOODYTMIQNLSSGLMONLSAGOLHIOFATVAVAVAGHIOHIGCA-----VSHCHTSEVPOHIOHIGHILFEL-THKOTVAFNDNRDPLSSVNTITADNCPKW-ITIVL 471
 mGLUR1 374 HR-----FQRLPHILLIENHKKVCTGNESEENYVQ--DSMGHINATVAVAGHIOHIGCA-----VSHCHTSEVPOHIOHIGHILFEL-THKOTVAFNDNRDPLSSVNTITADNCPKW-ITIVL 478
 hTIR1 374 HR-----FQRLPHILLIENHKKVCTGNESEENYVQ--DSMGHINATVAVAGHIOHIGCA-----VSHCHTSEVPOHIOHIGHILFEL-THKOTVAFNDNRDPLSSVNTITADNCPKW-ITIVL 497

TO FIG. 1B

FIG. 1A



FROM FIG. 1A



hTIR1 467 SSTSPVQINNETKIQWKGKDVVRKSGSDGQGHORVMGTHCCCECHPQAGGTHAKSDLYRCQCGKGEWAPESQVCEPRIMFETLRRLTSWMLAANTIIIEALITCTAGLFAHMLIM 594
 rTIR1 466 SSASLSPVHIDINKTQWKGKNOVPYSQITDIACHHVAWGSIHCCCECHPQAGGTHAMSELHICQCGTENPKESFTICPRIMFELANHEEISLIMANTIIIEALITCTAGLFAHMLIM 593
 hTIR2 466 ASYPLORQIKN-IDDSHETANNIIPASGCRQSSQAKKPGIIMCCCECHDLPGLFANTEDVEQOPNENWYSELSCKRQDLYELAWHPATHIAVALDAGLCHUSTEFAIMIEFWHFEQI 593
 rTIR2 470 ASYSPSKRQIY-INNVSMHPPNNMIPASGCRQSSQAKKPSVGLHPCCCECHDQMPGHNANSADENCISQPSGWSYKNDIICQORRPTLELWHEVPLIWAIIALGFTSEFAIMIEFWHFEQI 597
 hTIR3 472 GFEN-GSLRTER--IKIRWHTSDUKPVRQSCQCCQOMR-RVAGHSQCYDVIDEAGSRO-NPUDTAGTCCQDEWSPERSSTRERRRSRELANGEPAAMITIIIEALITCTAGLFAHMLIM 596
 rTIR3 479 GFEN-GTIDIOH--SVMMPG--NVRVISO-SRQCKQOMR-RVAGHSQCYDVIDEAGSYRK-HPUDTIIIECKQDQASPEKSFICQIPRPPKELANGEPAAMISIIIEALITCTAGLFAHMLIM 601
 mGluR1 498 GTWH--EGVINDDDYKIQNK--SGMVRSGSPFICQKQINVRKGEVSCNITQAKENEHVO--DEHTQRAQDILGMAPNAELICQGHIPRMLENSQIHESIIAIFNSQIHVIFVTLIEALITCTAGLFAHMLIM 620
 hTIR1 595 PAVRSAGGRCFLMIGSLAAGSGSLYGHGPEPRPACIIIRQAFNAGFTIIEISQIVRSFOLITIEKFSMPFTHAMVONFQAGLFAVM-ISSAAQIITICQIMLVVWTRIPA-REYORHPIIMFECTE 722
 rTIR1 594 PAVRSAGGRCFLMIGSLVAGSGSYSEHGEPPVPAIIIRQPFHSGFAIIEISQIVRSFOLITIEKFSMPFTHAMVONFQAGLFAVM-ISSAAQIITICQIMLVVWTRIPA-REYORHPIIMFECTE 721
 hTIR2 594 PAVRSAGGRCFLMIGSLVAVVMPVVGPEPMSTICQRCQLPELOTTICISQIVRSQVINCENWASRPRAYSIMVRYQCPVMSW-FIIVLKNMIEAGMLATGLSHTTIDDDPKITIVSQIP 722
 rTIR2 598 PAVRSAGGRCFLMIGSLVAVVMPVVGPEPMSTICQRCQLPELOTTICISQIVRSQVINCENWASRPRAYSIMVRYQCPVMSW-FIIVLKNMIEAGMLATGLSHTTIDDDPKITIVSQIP 726
 hTIR3 597 FLVDSGGHACFGMIGLIVCLISVILPQSPARCIAQOPSLIHPITIGGLISTIELOAAHIEVSELPISWADRIISGCTIRGPMIIVML-LAMIMEVALIATMILVAFPPPEW-TDMHMIPTIEALVHQT 724
 rTIR3 602 FLVDSGGHACFGMIGLIVCLISVILPQSPARCIAQOPSLIHPITIGGLISTIELOAAHIEVSELPISWADRIISGCTIRGPMIIVML-LAMIMEVALIATMILVAFPPPEW-TDMHMIPTIEALVHQT 729
 mGluR1 621 PAVSSSRELOYIITAGLFIAGVYCPFTLIANKETTSQYLRINGLSSAMQVSAINTKTWRTIARILACSKKICTRKPRFMSAQMIIISLISVQITIAATLIIMEPAGI-LSYESIK-EVMIQIT 748
 hTIR1 723 TNSIGHILAFLNCHLSISAFAGSLIGQDLPDYNKQVETSLLENFMSIAERTITASWIDKMTLPANWAGLSSSGGCGEHPKGCWIECRDINSTEIEFOASTODVTRCGST----- 841
 rTIR1 722 VNSVGHILAFLNCHLSISAFAGSLIGQDLPDYNKQVETSLLENFMSIAERTITASWIDKMTLPANWAGLSSSGGCGEHPKGCWIECRDINSTEIEFOASTODVTRCGST----- 840
 hTIR2 723 NYRNSHIFNTSLDILASVVGESPMVGGELPYNKQVETSLLENFMSIAERTITASWIDKMTLPANWAGLSSSGGCGEHPKGCWIECRDINSTEIEFOASTODVTRCGST----- 839
 rTIR2 727 NYRNGHIFNTSMDLASVVGESPMVGGELPYNKQVETSLLENFMSIAERTITASWIDKMTLPANWAGLSSSGGCGEHPKGCWIECRDINSTEIEFOASTODVTRCGST----- 843
 hTIR3 725 RSWNSGILHATVATLALCFLGTEIVRSQPRNARQGHITPMATHTHWSFVHLLANQWMLRPAVQVGLIHCYVIGLITAAFTIIEPCILMROQELNIPEEELGGGPDQAQONDGN-TGNOGKHE 852
 rTIR3 730 RSWNSGILHATVATLALCFLGTEIVRSQPRNARQGHITPMATHTHWSFVHLLANQWMLRPAVQVGLIHCYVIGLITAAFTIIEPCILMROQELNIPEEELGGGPDQAQONDGN-TGNOGKHE 858
 mGluR1 749 SN-LQVAVPGVNGIELINSQVYVAEKTRNVPAFNEAKMIAHIMVYTOIIMIAEVPYLYGSN--KLTITCFANVTSVTVAVLCQMTETPKMIIITAKPERI----- 845

FIG. 1B